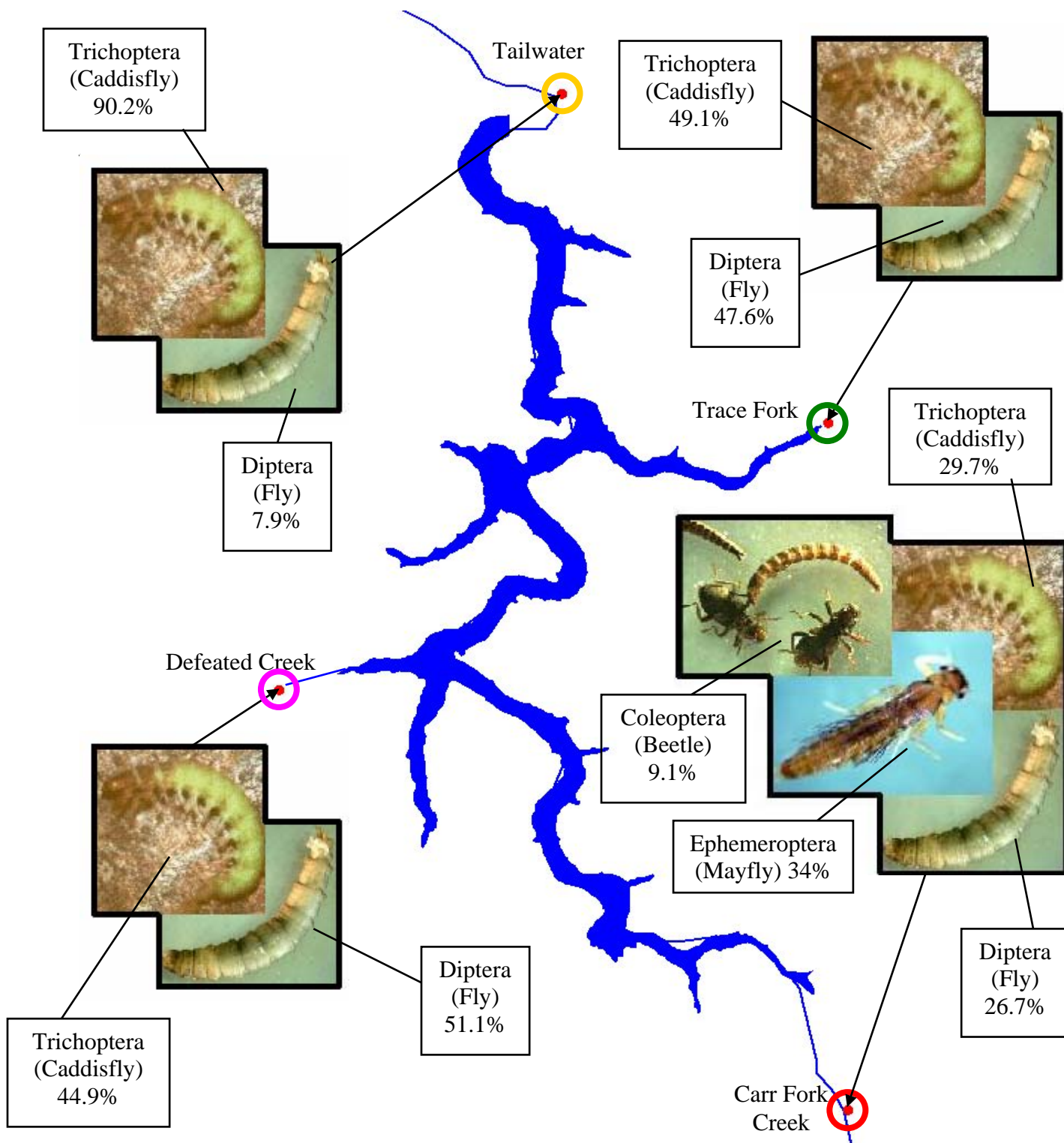


Aquatic Insects' Community Structure  
Carr Creek Lake Analysis  
September 16, 2004

Relative abundance of dominant taxa found at the sites shown below.



Community Metrics *	Carr Creek				5 Most Abundant Taxa at Tailwater 1. Cheumatopsyche sp. (Trichoptera) 86.2% 2. Cricotopus/Orthocladius sp. (Diptera) 2.7% 3. Rheotanytarsus exiguus group sp. (Diptera) 2.5% 4. Simulium sp. (Diptera) 2% 5. Hydropsyche betteni (Trichoptera) 1.8%
	Tailwater	Carr Fork	Trace Fork	Defeated Creek	
Collection Date	9/16/04	9/16/04	9/16/04	9/16/04	5 Most Abundant Taxa on Carr Fork 1. Cheumatopsyche sp. (Trichoptera) 24.6% 2. Stenonema vicarium (Ephemeroptera) 16.1% 3. Rheotanytarsus exiguus group sp. (Diptera) 9.6% 4. Optioservus sp. (Coleoptera) 8% 5. Stenonema sp. (Ephemeroptera) 7.6%
Total # of Taxa	15	31	24	20	
% Contribution of Dominant Taxa	93	64	86	72	
Modified Hilsenhoff Biotic Index (0, good – 10, bad)	6.16	7.00	6.28	6.32	
Shannon-Wiener Index	0.97	2.56	2.01	2.34	
# of Ephemeroptera Taxa	2	3	1	1	5 Most Abundant Taxa on Trace Fork 1. Cricotopus/Orthocladius sp. (Diptera) 35.2% 2. Cheumatopsyche sp. (Trichoptera) 21.6% 3. Hydropsyche sp. (Trichoptera) 15% 4. Hydropsyche betteni (Trichoptera) 11.6% 5. Antocha sp. (Diptera) 3.7%
% Ephemeroptera Taxa (Abundance)	1	33	0	3	
# of Plecoptera Taxa	0	0	0	0	
% Plecoptera Taxa (Abundance)	0	0	0	0	
# of Trichoptera Taxa	4	3	3	4	
% Trichoptera Taxa (Abundance)	82	29	49	39	5 Most Abundant Taxa on Defeated Cr 1. Cricotopus (Cricotopus) sp. (Diptera) 23.5% 2. Cheumatopsyche sp. (Trichoptera) 22.9% 3. Hydropsyche sp. (Trichoptera) 11.1% 4. Thienemannimyia group sp. (Diptera) 9.9% 5. Ceratopsyche morosa group sp(Trichoptera)5.9%
# of EPT Taxa	6	6	4	5	
% EPT Taxa	83	62	49	42	
# of Dipteran Taxa	6	17	14	12	
% Dipteran Taxa	7	26	47	44	
# of Chironomid Taxa	4	13	10	9	
% Chironomid Taxa	5	15	42	39	
# of Tanytarsini Taxa	1	2	2	3	
% Tanytarsini Taxa	2	9	3	9	
# of Orthocladiinae Taxa	2	7	7	3	
% Orthocladiinae Taxa	3	4	37	21	
% Cricotopus + Chironomus/Total Chiron.	48	14	85	53	
# of Dipteran Taxa – Tanytarsini and other Non-Insect Taxa	7	18	14	11	
% Dipteran Taxa - Tanytarsini and other Non-Insect Taxa	14	18	45	49	
Ratio of EPT to Chiron. Abundance	16.04	4.05	1.17	1.08	
% Tolerant Organisms	1	1	1	14	
# of Individuals / m <sup>2</sup>	1,311	2,343	1,603	1,008	
* Based on 4 replicate surber samples Substrate sampled – small stones					